COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
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Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

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HAZARDOUS WASTE PROGRAM
OFFICE OF WASTE PERMITTING AND COMPLIANCE
DIVISION OF LAND PROTECTION & REVITALIZATION

TEMPORARY EMERGENCY PERMIT

FOR TREATMENT OF HAZARDOUS WASTE

Permit Granted to: Naval Weapons Station Yorktown
NAVSEA Indian Head Division, Yorktown Detachment
P.O. Box 160
Yorktown, Virginia 23691-0160

EPA Identification No.: VAP000016373

Permit Issuance Date: October 31, 2011

Permit Expiration date: Upon completion of action described in this permit or by November 30, 2011, whichever occurs first.

Issue by

Department of Environmental Quality (DEQ)
Office of Waste Permitting and Compliance
629 East Main Street
P.O. Box 1105
Richmond, Virginia 23218

Authority

Commonwealth of Virginia Hazardous Waste Management Regulations (VHWMR), 9 VAC 20-60-270, promulgated under the authority of Chapter 14, Title 10.1, Code of Virginia (1950), as amended, and Title 40 Code of Federal Regulations (CFR) § 270.61, Emergency Permit.

Name and Address of Permit Applicant

Naval Weapons Station Yorktown
NAVSEA Indian Head Division, Yorktown Detachment
Building 457 Manley Road
Yorktown, VA 23691-5110

P.O. Box 160
Yorktown, Virginia 23691-0160

Phone: (757) 887-4311 ext. 248

Mailing Address:
Naval Station Norfolk
1510 Gilbert Street
Norfolk, VA 23511

Phone: (757) 341-0400

Name, Address of Generator Facility, Phone Number, and EPA ID Number

Naval Weapons Station Yorktown
NAVSEA Indian Head Division, Yorktown Detachment
Building 457 Manley Road
Yorktown, VA 23691-5110

P.O. Box 160
Yorktown, Virginia 23691-0160

Phone: (757) 887-4311 ext. 248

EPA ID No. VA8170024170 - Facility is a large quantity generator (LQG) of hazardous waste.

Contact Name and Phone Number

Crystal St.Clair-Canaii, Hazardous Waste Supervisor or
Bernadette Reese, Acting Hazardous Waste Supervisor
Naval Station Norfolk
1510 Gilbert Street
Norfolk, VA 23511

Phone: (757) 341-0408
Fax: (757) 341-0499
E-mail: crystal.stclaircanai@navy.mil or bernadette.reese@navy.mil

Name, Location and EPA ID Number of Treatment Facility

Naval Weapons Station Yorktown
NAVSEA Indian Head Division, Yorktown Detachment
Building 373
Yorktown, Virginia 23691-5110

EPA ID No. VAP000016373

Action Authorized

The Naval Weapons Station Yorktown (NWSY), NAVSEA Indian Head Division, Yorktown Detachment, is permitted by this Temporary Emergency Permit to operate as a facility for the emergency treatment of the hazardous waste listed below utilizing the procedures described under the heading "Treatment Procedures."

Description of Waste:

The hazardous waste consists of two (2) 55-gallon drums of liquid Tetrahydrofuran (THF) with D001 and U213 hazardous waste numbers or codes.

(Note that the above containers are suspected as potentially reactive with the additional hazardous waste number/code of D003, as applicable, due to the age of the containers and the possible formation of peroxides and/or polymerization of the chemical materials.)

D001 – Ignitability
D003 - Reactivity
U213 – Tetrahydrofuran

Location of Waste – Description and Map

The waste is stored in Building 373, with a physical address of Naval Weapons Station Yorktown, NAVSEA Indian Head Division, Yorktown Detachment, Building 373, Yorktown, VA, 23691-5110.

(See Attachment 1 for the maps where the hazardous waste material is stored.)

Qualification of Individual(s) Performing the Treatment

Tradebe™ has been contracted to stabilize the THF.

Tradebe™
4343 Kennedy Avenue
East Chicago, IN 46312
Phone: (219) 397-3951

Fax: (219) 397-6411

Mr. Glenn Perham, the Reactive Division Manager for Tradebe™, will perform the material handling, remote opening, sampling, and stabilization of the THF.

Mr. Edward Scurry has been with Tradebe™ since May 2010 and has been received 40 Hour OSHA HAZWOPER training and High Hazard Reactive Chemical Training. He is currently in training but acts as the fire watch during stabilization projects. Mr. Curry will assist Mr. Perham during the material handling and treatment event.

Mr. Glen Perham performed the remote opening, sampling, and chemical neutralization or stabilization of the THF. Mr. Perham has over 4 years experience handling reactive chemicals. He has stabilized countless individual chemical containers that have been potentially reactive. These reactive chemicals that Mr. Perham has treated in the past have been, shock sensitive, air sensitive, light sensitive, moisture sensitive and temperature sensitive. Some examples of the most common types of reactive chemicals that Mr. Perham has stabilized include: dry picric acid, ethyl ether, tetrahydrofuran, nitro compounds, di-methyl aluminum hydride, and also bis compounds. He also has extensive knowledge and experience with downloading and de-commissioning pressure vessels, such as chlorine cylinders.

(See Attachment 2 for resumes of Glen Perham and Edward Scurry.)

When Treatment Occurred

The management and chemical stabilization of the Tetrahydrofuran (THF) has been scheduled to begin at approximately 1330 (1:30 PM) on Tuesday, November 8, 2011, and will continue until treatment and stabilization is completed for the two containers.

Once treated, the stabilized hazardous waste will be manifested and transported off-site by the NWSY facility to a permitted RCRA treatment storage, treatment, disposal (TSD) facility for subsequent treatment and disposal of the RCRA hazardous waste.

Treatment Area – Description and Map

The area of hazardous waste storage and treatment or stabilization work is the storage building 373 located in the Indian Head Detachment restricted or operating area.

To get to Bldg. 373 enter Gate 1 and go straight following Main Road. Enter the restricted area and in approximately 3 miles, at the very end of Main Road, Bldg. 373 will be located on your left hand side.

The storage area and area of treatment is clamshell locker located on the back loading dock of Bldg. 373 on the outer perimeter of Indian Head's operating area. The back loading dock has a paved surface and the clamshell locker is capable of spill containment. An additional spill kit is located next to the clamshell locker as well. There are no other explosive operations located

within this area. Surrounding buildings have been cleared out and abandoned due to the Department of Defense (DOD) Base Realignment and Closure (BRAC) of the NAVSEA IHDIV, Yorktown Detachment.

All waste management and treatment is to occur inside Building 373.

(See Attachment 1, Site Location Map where the hazardous waste is stored and scheduled for treatment, and the planned Evacuation Route Map.)

Name and Phone Number of State and Local Officials Contacted Prior to Treatment

Department of Environmental Quality
Richard J. Criqui, Jr., C.P.S.S.
Environmental Engineer Senior
629 East Main Street,
Richmond, VA
Phone (804) 698-4013
E-mail: Richard.criqui@deq.virginia.gov

Department of Environmental Quality
Tidewater Regional Office
Milton Johnston, Waste Compliance Manager
5636 Southern Blvd.
Virginia Beach, VA 23462
Phone: (757) 518-2151

Explosive Ordnance Disposal (EOD)
Mr. Charles A. Yohnke
Leading Chief Petty Officer
EODMU TWO DET YORKTOWN
Naval Weapons Station Yorktown
Yorktown, VA 23691
Phone: (757) 887-4177

Safety Manager/Explosive Safety Officer
Mr. John Foster
Naval Weapons Station Yorktown
Main Road, Building 1959
Yorktown, VA 23691
Phone: (757) 887-4558

Base Security Management Office
Naval Weapons Station Yorktown
Bldg 1797
Yorktown, VA 23691
Phone: (757) 887-7349

Evacuation Route

See Attachment 1, Site Location Map where the hazardous waste is stored and scheduled for treatment, and the planned Evacuation Route Map.

Treatment Procedures

Listed below are the documented and planned treatment procedures for the management and treatment (stabilization) of the Tetrahydrofuran (THF):

1. The work area is to be selected, staged, and secured by the staff from the NWSY and the staff from Tradebe™.

2. The waste material in containers is to be stabilized inside the Building 373, one container at a time. Each container of THF is to be remotely opened and treated inside Building 373 and stabilized prior to managing the next container of THF.

3. A remote drum opener, which utilizes Nitrogen as the power source, is to be utilized to gain access to the contents of the drums and bottles, as applicable. Nitrogen is used to maintain a non-reactive environment during the management of the volatile THF in containers. The remote drum opener is to be operated from a distance of approximately 25-50 ft to provide a buffer zone to the treatment personnel in the event of an explosion.

4. Once a container is opened, the contents of the container is to be sampled and tested in order to determine the level or concentration of peroxides present in the container and to calculate the amount of chemical stabilization solution which is necessary for neutralization or stabilization of the containerized material.

5. A stabilization solution will be made from Ferrous Ammonium Sulfate, Butylated Hydroxytoluene, Hydroquinone, Potassium Hydroxide, and water. This solution will aid in the destruction or neutralization of the peroxides that have formed in the stored THF containers.

6. Based on the results from Step 4 of this Treatment Procedure, the appropriate stabilization solution will be added to each container. This solution will be carefully added to each container so to neutralize and destroy any peroxides that had formed in the containerized THF material.

7. After stabilization, each container will be re-tested to re-establish the level of peroxides present in order to ensure peroxide concentrations acceptable for safe transportation. Each waste container will be re-profiled and labeled based upon the documented test results.

8. The above procedures nos. 2 through 7 are to be followed for each container prior to management and treatment of a subsequent container of hazardous waste.

9. After stabilization, the containers will be repackaged for transportation in accordance with all Federal, State, and local regulations. All drums and bottles must be shipped in DOT approved shipping containers either in original containers or over-pack containers.

10. The THF and any drums and/or materials coming into contact with the THF during the treatment or stabilization process are to be sent to a permitted hazardous waste Treatment, Storage, and Disposal (TSD) facility, for subsequent treatment and/or disposal.

11. Hazardous Waste manifests and land disposal restriction (LDR) forms will be prepared and reviewed prior to shipment to ensure compliance with requirements of 40 CFR Part 262 and 49 CFR Part 172.

12. The Navy will receive the signed receipt of the final signed manifest for the containers of hazardous waste from the receiving TSD facility along with the certificate of destruction of the hazardous waste materials. The signed manifests and certificates of destruction will be provided in the Report which is to be submitted to the DEQ.

Permit Termination

This permit may be terminated by the DEQ at any time, without process, if the determination is made that termination is appropriate to protect human health and/or the environment.

Permit Standards with which Compliance is Required

Effective Immediately:

VHWMR Part III, 9 VAC 20-60-265, as adopted from 40 CFR, Part 265, Subpart Q, Chemical , Physical, and Biological Treatment, and Subpart P, Thermal Treatment, as applicable.

VHWMR Part III, 9 VAC 20-60-264, as adopted from 40 CFR, Part 264, Subpart B, General Facility Standards, Subpart C, Preparedness and Prevention, and Subpart D, Contingency Plan and Emergency Procedures, and Subpart X, Miscellaneous Units, as applicable.

VHWMR Part III, 9 VAC 20-60-270, as adopted from 40 CFR, Part 270, EPA Administered Permit Programs: The Hazardous Waste Permit Program.

VHWMR Part XII, Permit Application and Annual Fees, 9 VAC 20-60-1260, Purpose, Scope and Applicability.

All waste materials and residuals from the treatment will be managed as hazardous waste in accordance with VHWMR Part III, 9 VAC 20-60-262, as adopted from 40 CFR, Part 262, Standards Applicable to Generators of Hazardous Wastes, as applicable.

Reporting

Within 30 days of permit expiration or termination, the Permittee shall submit to the Department of Environmental Quality (DEQ) a written Report detailing the times, pertinent events, sampling and analytical data, as applicable, and results of the permitted treatment activity, and any subsequent storage, treatment, and disposal of the wastes or remaining waste residuals. Waste manifests for the shipment of the wastes or remaining treatment residuals to a permitted RCRA Treatment, Storage, or Disposal (TSD) Facility, or as applicable, the documentation associated with shipment to a RCRA Subtitle D facility, shall be included in the Report submittal. Please mail this Report to the following address:

Department of Environmental Quality
Attn: Richard J. Criqui, Jr., C.P.S.S
Environmental Engineer Senior
629 East Main Street
P.O. Box 1105
Richmond, VA 23218

E-mail: Richard.Criqui@deq.virginia.gov

Reason for Issuance

The Department of Environmental Quality has determined that, because of the circumstances and nature of the waste, expedient action to protect human health and the environment was necessary. The waste scheduled for treatment was determined potentially unstable and treatment on site was deemed appropriate to be protective of human health and the environment.

An oral or verbal approval of the Emergency Permit for waste management and treatment of the described hazardous waste was issued by the DEQ on October 31, 2011.

This written Emergency Permit is in accordance with the Virginia Hazardous Waste Management Regulations (VHWMR), 9 VAC 20-60 and 9 VAC 20-60-270, promulgated under the authority of Chapter 14, Title 10.1, Code of Virginia (1950), as amended, and Title 40 Code of Federal Regulations (CFR) § 270.61, Emergency Permits.

Public Comment Period

A 30-day public comment period is provided. The public comment period is to be announced by a public notice on November 10, 2011. The DEQ solicits written comments on the issuance of the Permit until 5:00 PM, Monday, December 12, 2011. The comments must be received at the DEQ's Richmond Office address before the end of the comment period.

Written comments are to be sent to Richard Criqui, Virginia Department of Environmental Quality, 629 East Main Street, P.O. Box 1105, Richmond, Virginia 23218. (Phone: (804) 698-4013; e-mail: richard.criqui@deq.virginia.gov.)

A copy of the Permit may be obtained and reviewed at the above DEQ Richmond Office, and at the DEQ's Tidewater Regional Office, (Attn: Lisa Silvia), 5636 Southern Boulevard, Virginia Beach, VA 23462. (Phone No. (757) 518-2175, e-mail: lisa.silvia@deq.virginia.gov).

The DEQ will accept written comments from the public by electronic mail (richard.criqui@deq.virginia.gov). All comments received by mail or e-mail must provide the commenter's name, address, and phone number, and an e-mail address should be provided, if available. Comments will not have an effect on the issuance of this Permit; however, comments will be reviewed and considered with regard to issuance of future emergency permits.

Emergency Occurrence

In the event of an emergency occurrence outside the scope of this Permit, contact: Ms. Leslie A. Romanchik at (804) 698-4129, Hassan Vakili at (804) 698-4155, or Richard Criqui, at (804) 698-4013. Upon successful completion of the events authorized by this Permit, contact Richard Criqui, at (804) 698-401 or by e-mail at richard.criqui@deq.virginia.gov.

Attachments

Attachment No. 1 – Naval Weapons Station Yorktown Maps of Storage and Treatment Location and Evacuation Route.

Attachment No. 2 - Tradebe™ Resumes for Glen Perham and Ed Scurry.

_____ _____

Date

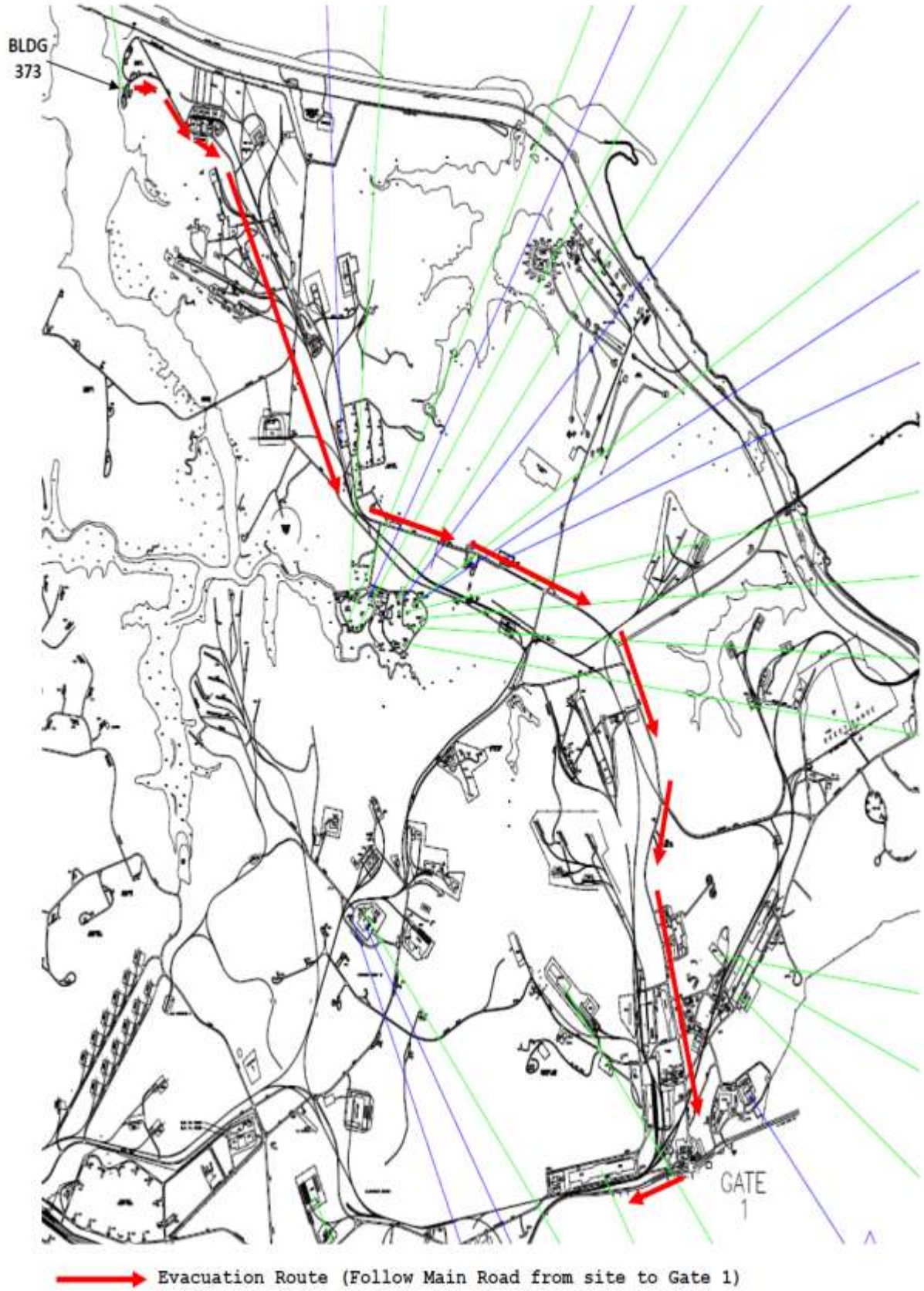
Leslie A. Romanchik
Hazardous Waste Program Manager

ATTACHMENT No. 1

Naval Weapons Station Yorktown
Maps

Building 373 Site Location Map
Storage and Treatment Location

BLDG. 373 SITE LOCATION MAP & EVACUATION ROUTE TO GATE 1



Attachment No. 2

Tradebe™ Resumes for Glen Perham and Ed Scurry

GLENN PERHAM
Professional Experience

Tradebe Treatment and Recycling- Reactive Division Manager
2010-Present

- Manage the operations, training and logistics fo the Treatment and Recycling reactive chemical division
- Oversee the cylinder disposal operations at Tradebe
- Provide technical support regarding reactive chemicals and there safe handling
- Assist Tradebe facilities with reactive chemical emergency responses.

Pollution Control Industries- Reactives Division Project Manager
2008 - 2010

- Designed and implemented a living inventory system for hazardous compressed gases.
- Conduct explosive identification and cylinder safety training for new employees.
- Organize, document and maintain training records to ensure annual and new hire training compliance.
- Provide Sales, Plant Operations and customers with technical support regarding emergency response and safe handling of reactive chemicals.
- Stored, handled, and disposed of hazardous waste in accordance with Federal, State, and Local regulations.
- Responsible for coordination, scheduling, and billing for customers.

United States Army- Chemical, Biological, Radiological and Nuclear NCO
2006 - Present

- Environmental NCOIC for 90th Sustainment Brigade during Operation Iraqi Freedom.
- Informed, advised, and trained approximately 3,000 soldiers on environmental responsibilities including SARA, RCRA, DOT and EPA.
- Planned, coordinated, and implemented an Environmental Program on Joint Base Balad, Iraq, targeting over 3,000 service members.
- Site Surveyed Environmental Considerations for multiple facilities on Joint Base Balad, Iraq.
- Maintained 100% accountability of $350,000 worth of CBRN equipment.

Pollution Control Industries- Field Chemist
2006 - 2008

- Proper identification, classification, packing and labeling of hazardous waste.
- Processed regulatory paperwork to ensure compliance with all DOT, EPA and Resource Conservation and Recovery Act (RCRA) regulations.
- Maintained records such as hazardous and non-hazardous waste manifests, land disposal restriction forms and associated documents.
- Consult customers on OSHA, EPA, SARA, RCRA and DOT hazardous chemical regulations.

Education

- B.A. Biology 2000, Blackburn College, Carlinville, IL

Professional Resume

Name: Edward M. Scurry

Title: Environmental Field Chemist

Education: Bachelor's of Science, Safety and Environmental Management; Slippery Rock University of Pennsylvania

Professional Development (Certifications):
OSHA 40-hour Hazwoper 2008
OSHA 8-hour Refresher (annual)
Bloodborne Pathogens Training 2008
High Hazard Reactive Chemical Training 2011
High Hazard Cylinder Training 2011
TWIC Clearance
Class B CDL with Hazmat and Air Brake Endorsements
DOT Training 2011

Experience: Tradebe Treatment and Recycling, *Environmental Field Chemist* May 2010-Present

- **Identified, segregated, packaged, and shipped hazardous waste in accordance with RCRA/DOT regulatory standards**
- **Completed all necessary shipping documentation (i.e. waste manifest, LDR, Drum Inventory Form, etc.)**
- **Transported waste containers off-site**
- **Assisted PCI's Project Manager with waste quotes and job scheduling**
- **Assisted generators with the completion of Waste Profile forms for new watestreams**
- **Served as Site Supervisor at household hazardous waste collections.**

Internship: Allegheny County of Pa Department of Law, *Safety Intern* May 2008-August 2008